

**REMARKS**

This case has been carefully reviewed and analyzed in view of the Official Action dated February 12, 2003.

The Examiner has objected to the specification and stated that the specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. A substitute specification which contains no new matter is submitted for the Examiner's approval.

Further, the Examiner has rejected claim 6 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Furthermore, the Examiner has rejected claim 6 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 6 has been canceled and replaced with new claim 7 which is carefully drafted to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Moreover, the Examiner has rejected claim 6 under 35 U.S.C. 103(a) as being unpatentable over admitted prior art (Admission) in view of U.S. Patent No. 4,163,819 (Yung et al) and U.S. Patent No. 5,964,009 (Hoepfl et al).

Admission, the first reference cited by the Examiner, teaches it is conventionally known to place a rigid article within a recess of a mold followed by injecting material into the mold to provide the surface of the molded article with a specific mark or logo. However, this reference fails to disclose a method of forming a trade mark decoration on a soft ribbon stripe comprising the steps of: thermal pressing a combination end of the ribbon stripe to cure a texture of the ribbon stripe; fastening the combination end of the ribbon stripe onto a mold; mixing injection molding

material with a material having properties of the material of the ribbon stripe so that this mixture of materials and the ribbon stripe form as one unit when melted; injection molding of the mixture into the mold holding the combination end of the ribbon stripe in order to form a primary blank plastic material that includes a protruded trademark pattern; placing the primary blank plastic material into a second mold where a second injection molding is injection molded over the primary blank plastic material where only the protruded trademark pattern of the primary blank plastic material is not covered by the second injection molding material. Hence, this reference can be clearly distinguished from the present invention.

Yung et al, the second reference cited by the Examiner, teaches that heat and pressure will cause a non-woven fabric to become stiff. Nevertheless, as the previous cited reference, the Yung et al reference does not teach or suggest a method of forming a trade mark decoration on a soft ribbon stripe comprising the steps of: thermal pressing a combination end of the ribbon stripe to cure a texture of the ribbon stripe; fastening the combination end of the ribbon stripe onto a mold; mixing injection molding material with a material having properties of the material of the ribbon stripe so that this mixture of materials and the ribbon stripe form as one unit when melted; injection molding of the mixture into the mold holding the combination end of the ribbon stripe in order to form a primary blank plastic material that includes a protruded trademark pattern; placing the primary blank plastic material into a second mold where a second injection molding is injection molded over the primary blank plastic material where only the protruded trademark pattern of the primary blank plastic material is not covered by the second injection molding material. Thus, this reference is in no way similar to the present invention.

Hoepfl et al, the third reference cited by the Examiner, teaches a process for forming tool handles. Similarly, this reference fails to disclose, teach or suggest a

method of forming a trade mark decoration on a soft ribbon stripe comprising the steps of: thermal pressing a combination end of the ribbon stripe to cure a texture of the ribbon stripe; fastening the combination end of the ribbon stripe onto a mold; mixing injection molding material with a material having properties of the material of the ribbon stripe so that this mixture of materials and the ribbon stripe form as one unit when melted; injection molding of the mixture into the mold holding the combination end of the ribbon stripe in order to form a primary blank plastic material that includes a protruded trademark pattern; placing the primary blank plastic material into a second mold where a second injection molding is injection molded over the primary blank plastic material where only the protruded trademark pattern of the primary blank plastic material is not covered by the second injection molding material. Consequently, this reference is completely different from the present invention.

Accordingly, even if the disclosures of the cited references are combined together, the combined disclosure still fails to teach each and every step of the claimed invention and so the subject matter sought to be patented as a whole would not have been obvious to one of ordinary skill in the art.

It is now believed that the subject Patent Application has been placed in condition of allowance, and such action is respectfully requested.

Respectfully submitted,



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**TITLE: METHOD OF FORMING A TRADE MARK ON A RIBBON  
STRIPE****BACKGROUND OF THE INVENTION****(a) Field of the invention**

5 The present invention relates to a trade mark ornamental pattern, and in particular, to a method of forming a trade mark pattern on a ribbon stripe, and <sup>where</sup> the ribbon body will not expose <sup>itself</sup> from a covering material.

**(b) Description of the prior art**

<sup>the</sup> In conventional method of covering a rigid article with a plastic material, 10 the article is placed within a recess of a mold and then the plastic material is injected into the mold. Thus, the surface of the molded article is provided with a specific mark or logo.

However, <sup>if</sup> a soft ribbon stripe is to <sup>be</sup> provide<sup>d</sup> with a plastic mark, it <sup>may have</sup> drawbacks ~~may be occurred~~. The ribbon stripe is a soft material and the end 15 of the stripe cannot be effectively positioned. Under <sup>a</sup> high pressure <sup>in</sup> ejection process, the molded decoration is exposed from the ribbon stripe body after the molding process. Accordingly, these defect<sup>ive</sup> products cause an increase in production cost<sup>s</sup>.

## SUMMARY OF THE INVENTION

Accordingly, it is an object of the present invention to provide a method of forming a trade mark on a ribbon stripe, wherein defect<sup>caused during the production process</sup> product formed can be controlled, and the cost of production<sup>be</sup> is greatly reduced.

- 5 An aspect of the present invention is to provide a method of forming a trade mark decoration on a soft ribbon stripe, comprising the steps of thermal pressing a combination end of the ribbon stripe to cure the texture of the ribbon stripe and increase the gaps of the texture; fastening the combination end onto a mold; mixing<sup>in</sup> ejection molding material with a material similar to  
10 or ~~alike~~<sup>identical with</sup> the material of the ribbon stripe so that these materials can form as one unit when melt<sup>ed</sup> high pressure ejection molding<sup>of</sup> the ribbon stripe to combine with a primary blank plastic material and a protruded trade mark pattern being formed on the primary blank plastic ~~material~~ material; placing the first<sup>in</sup> ejection molded primary blank plastic material into the mold for<sup>a</sup> second ejection  
15 molding and the protruded trade mark pattern being located at a recess of the second mold; and processing to a second<sup>in</sup> ejection molding to enclose the primary blank plastic material at the exterior thereof to form an ornamental article.

The foregoing objects and summary provide only a brief introduction to  
20 the present invention. To fully appreciate these and other objects of the

present invention as well as the invention itself, all of which will become apparent to those skilled in the art, the following detailed description of the invention and the claims should be read in conjunction with the accompanying drawings. Throughout the specification and drawings identical reference  
5 numerals refer to identical or similar parts. Many other advantages and features of the present invention will become manifest to those versed in the art upon making reference to the detailed description and the accompanying sheets of drawings in which a preferred structural embodiment incorporating the principles of the present invention is shown by way of illustrative example.

## BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective view of a ribbon stripe in accordance with the present invention.

Fig. 2 is a perspective view of a second preferred embodiment of the ribbon stripe in accordance with the present invention.

Figs. 3A, 3B and 3C are schematic views showing the process of manufacturing the ribbon stripe in accordance with the present invention.

Fig. 4 is a perspective view of the primary blank material of the present preferred embodiment. *(The trademark shown in the drawings is a registered trademark of the Nike Corporation).*

Fig. 5 is a perspective view of the completed ribbon stripe in accordance with the present invention. *(The trademark shown in the drawings is a registered trademark of the Nike Corporation).*

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

For the purpose of promoting an understanding of the principles of the invention, reference will now be made to the embodiment illustrated in the drawings. Specific language will be used to describe same. It will, nevertheless, be understood that no limitation of the scope of the invention is thereby intended, such alterations and further modifications in the illustrated device, and such further applications of the principles of the invention as illustrated herein being contemplated as would normally occur to one skilled in the art to which the invention relates.

Referring to Fig. 1, there is shown a ribbon stripe 10 used for the forming of a trade mark decoration thereon. In accordance with the present invention, a combination end 11 of the ribbon stripe 10 is thermally pressed (as shown in Fig. 3A step). The ribbon stripe 10 <sup>undergoes</sup> ~~is undergone~~ the thermal pressing process at a temperature which does not melt the ribbon stripe 10. This process includes <sup>an</sup> ultra sonic fabrication method which causes the individual fiber unit of the ribbon stripe 10 to cure to an appropriate extent. The extent of curing does not <sup>reach</sup> ~~include~~ excessive stages such as the carbonization level, and breaking level.

Referring to Fig. 3, the combination end 11 of the ribbon stripe 10 having <sup>been</sup> heat pressed is placed into a primary mold 20, and the



circumferential edge 21 of the primary mold 20 grips the ribbon body of the combination end 11. By means of a first <sup>in</sup>jection molding process, a primary blank plastic material 22 is formed at the end of the ribbon stripe 10.

In accordance with the present invention, before the <sup>in</sup>jection molding of the primary blank plastic material 22, the material 22 has to be pressed and mixed with ribbon stripes or the like by <sup>a</sup> pressing machine to change the molecular structure of the first <sup>in</sup>jection molding material, so that the molecular structure of the ribbon stripe and the outer enclosed primary blank material are formed as one unit during the process of melting.

Referring to Fig. 4, there is shown a completed first <sup>in</sup>jection molded blank plastic material 22. As the ribbon stripe 10 is gripped at one edge, under <sup>a</sup> high pressure fabrication process, the ribbon body 23 may <sup>be</sup> exposed to the outside and the primary blank plastic material 22 at the surface is formed into a protruded trade mark pattern 24.

The primary blank plastic material 22 is then placed in a second mold 25 with the protruded trade mark pattern 24 located at a recess 26 of the second mold 25. The combination end 11 is secured by the circumferential edge of the mold and is secured at two positions.

After the second <sup>in</sup>jection process, the primary blank plastic material 22 is then covered again with plastic material so as to totally cover the

ribbon body 23 and to form into an aesthetic trade mark decoration (as shown in Fig. 5).

In accordance with the present invention, if the texture of the ribbon stripe 10 is rough and the thickness of the ribbon stripe is <sup>equal to</sup> about or larger than 1mm, the ribbon stripe 10 <sup>will be of a firm consistency</sup> is provided with an excellent hardness <sup>once</sup> if the combination end 11 has been thermally pressed.

The stripe 10 is suitable for combination. Accordingly, the ribbon body 23 will not <sup>be</sup> exposed beyond the blank material after the first covering the molded primary blank plastic material 22. Hence, in accordance with the present invention, a fabricated ornamental article is obtained.

Referring to Fig. 2, the combination end 11 of the ribbon stripe 10 is provided with a hole 12 so that the plastic material for <sup>in</sup>jection and covering can fully flow in <sup>side</sup> and combine to form as one unit.

It will be understood that each of the elements described above, or two or more together may also find a useful application in other types of methods differing from the type described above.

While certain novel features of this invention have been shown and described and are pointed out in the annexed claim, it is not intended to be limited to the details above, since it will be understood that various omissions,

modifications, substitutions and changes in the forms and details of the device illustrated and in its operation can be made by those skilled in the art without departing in any way from the spirit of the present invention.